

Abstract

A device for measuring resistances associated with electrical contacts of a contact ring used in a semiconductor wafer electroplating process. The device includes a substrate and a conductive pattern on the substrate. The conductive pattern is electrically contactable with the electrical contacts of the contact ring. Resistance measurement circuitry is connected to the conductive pattern. The resistance measurement circuitry is configured to send test signals to the conductive pattern, receive signals from the conductive pattern, and measure the resistances associated with the electrical contacts of the contact ring. A method of using such a device to measure resistances associated with electrical contacts of a contact ring used in a semiconductor wafer electroplating process is also provided.